INTRODUCTION TO SOCIAL STATISTICS

SOC 3112-090, Fall 2014, 04 Credits

Photo credit: http://imgs.xkcd.com/comics
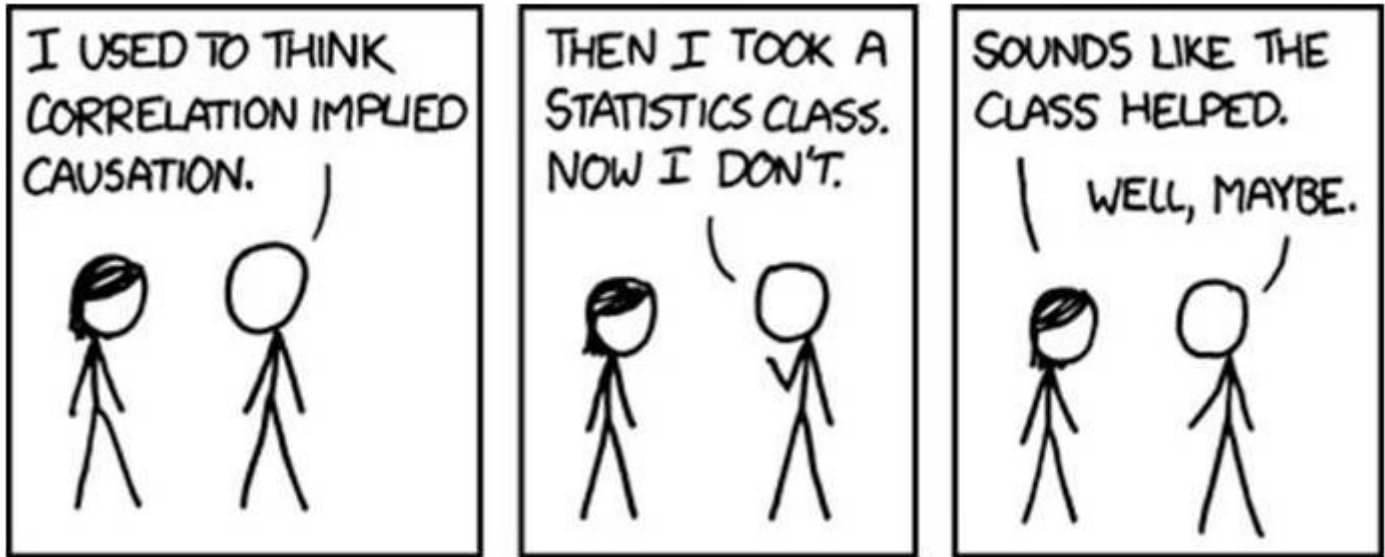
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Course Overview

Course Summary

This course fulfills the Quantitative Reasoning (QB) and Quantitative Intensive (QI) requirement of the University of Utah. Basic algebra knowledge is required.

This course introduces you to the world of empirical research for social sciences. It aims at providing you the abilities to calculate and interpret statistics in social context. Strong quantitative skills will assist you not only in academic success but also in your daily activities.

There will be three sections in this class. First, we will start with descriptive statistics, namely frequency distribution, measures of central tendency and variability. Second, we will move on to basic inferential statistics like t-test or ANOVA and drawing conclusion about the population. Finally, we will learn how to describe relationship between variables, including measure of association, correlation and bivariate regression.

Course Objectives

By the end of this course, you will be able to:

- Calculate descriptive statistics

- Calculate inferential statistics

- Measure relationship between variables

- Interpret statistics within the context of social sciences

Required Text and Material

- Frankfort-Nachmias, C. and A. Leon-Guerrero. 2014. *Social Statistic for a Diverse Society*. 7th Edition. Sage Publications.

- Calculator (with square-root function)

Teaching and Learning Methods

- This course will be online which means we will not meet in class. Since the content of this class is *very intense* I expect you to cover the reading assignments, watch the videos and do your homework so that exams will not be too hard for you.

- All the teaching materials will be available on your canvas. We will communicate mainly and regularly on canvas. Be sure to check your canvas frequently for class announcement. Having canvas notification linked to your u-mail or other emails might help keeping you update.

Policies

- *Late work:* No late work or make up exam accepted unless you acknowledge me beforehand. Once you pass any due date your homework and exams will be automatically locked.

- *Reading assignment:* You will find much of the material covered in this course *overwhelming*. Reading the text along with doing your homework will help you better prepare for your exams.

- *Assistance:* If you have any question or request, please email me. I will reply in a timely manner.

- *The Student Code:* Students and faculty at the University of Utah are obligated to behave in accordance with the ordinances of the University. The Student Code (or Students' Rights and Responsibilities) is located on the Web at: http://www.admin.utah.edu/ppmanual/8/8-10.html. You are encouraged to review this document. All of the rights and responsibilities applicable to both the student and the faculty member will be observed during the semester.

Student Support Resources

Americans with Disabilities Act (ADA) Statement

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services (CDS), 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the CDS.

Wellness Statement

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness - www.wellness.utah.edu; or 801-581-7776.

Assessments

Homework (10 points each): 25% total

There will be a total of **13 assignments** under Quizzes on canvas. Homework will be a few questions at the end of each chapter in form of quizzes similar to the online exams. Please check the tentative schedule below or your canvas calendar for deadlines.

Online Exams (100 points each): 75% total

There will be **three online exams** under Quizzes on canvas. Each exam will be **two hours** long and will cover all materials in one section. You have **one attempt** to complete your exam. Once you answer a question, it will be locked and you will not be able to change your answer. You are expected to complete your exam during exam period listed below in the schedule rubric. **No makeup exam** is allowed except it is an emergent **medical condition**.

Grading Scale

| 90-100%: A | 80-89%: B | 70-79%: C | 60-69%: D | 0-59%: E |

Grades will not be curved.

Tentative Schedule

Week	Content	Readings *(Read for this week)*	Assignments *(Due at the end of this week)*
Section 1: Descriptive Statistics			
08/24-31	The What & Why of Statistics	Chapter 1	#1: What & Why of Statistics
08/31-09/07	Frequency Distribution & Graphic Presentation	Chapter 2 & 3	#2: Frequency Distribution

09/07-14	Measure of Central Tendency	Chapter 4	#3: Central Tendency
09/14-21	Measure of Variability	Chapter 5	#4: Variability
09/21-28	*Exam 1 Period*		
Section 2: Inferential Statistics			
09/28-10/05	Normal Distribution	Chapter 6	#5: Normal Distribution
10/05-12	Sampling and Sampling Distribution	Chapter 7	#6: Sampling Distribution
10/12-19	*Fall break: Take a break from this class!!!*		
10/19-26	Estimation	Chapter 8	#7: Estimation
10/26-11/02	Testing Hypotheses	Chapter 9	#8: Testing Hypothesis
11/02-09	Chi-square Test	Chapter 11	#9: Chi-square Test
11/09-16	Analysis of Variance (ANOVA)	Chapter 14	#10: ANOVA
11/16-23	*Exam 2 Period*		
Section 3: Relationship between Variables			
11/23-30	Cross-Tabulation	Chapter 10	#11: Cross-Tabulation
11/30-12/07	Measures of Association for Nominal and Ordinal Variables	Chapter 12	#12: Measures of Association for Nominal and Ordinal Variables
12/07-14	Bivariate Correlation & Regression	Chapter 13	#13: Correlation & Regression
12/04-19	*Exam 3 Period*		

Revised on March, 24th, 2014